

Don't let food make you sick!

Food safety tips for those at increased risk of food-borne illness *

Although America has some of the safest food in the world, an average of one in six Americans has some type of food-borne illness each year. When you are immune suppressed, it is even easier for you to get sick from food.

Following these guidelines can help you be healthy. Use the guidelines for safety in buying, preparing and storing your food. The chart [“Foods to Choose”](#) can guide your meal selections.

The main principles:

1. **Clean** hands and surfaces often.
2. **Separate** foods so that you don't cross contaminate.
3. **Cook** and **chill** food to safe temperatures.

Preparing food

- ▶ **Everything that touches food should be clean.**
- ▶ Wash your hands well before and after handling each food.
- ▶ Use soap and rub hands vigorously for 20 seconds under running, warm water.
- ▶ Use hot, soapy water throughout meal preparation to wash dishes, cooking utensils, knives, cutting boards, and counters.

- ▶ Bacteria can spread from surfaces in the refrigerator to your food.

Make sure that all surfaces of the refrigerator, such as shelves, walls and doors, are cleaned regularly with antibacterial cleanser (use diluted bleach:1 teaspoon bleach in 1 quart water).

- ▶ Don't use dishrags and sponges, since they can harbor dangerous bacteria. Instead, use clean paper towels and sanitizing cleansers or disinfectant wipes to clean surfaces.

Shopping

- ▶ Place raw meat, fish or poultry into separate plastic bags before placing them in your shopping cart.
- ▶ Select frozen foods and meats last, just before checking out.
- ▶ Wash re-usable shopping bags well between uses.
- ▶ Use insulated cooler bags, cool packs, or coolers to keep food cold on the way home, especially in hot weather.

Storing food

- ▶ Use a refrigerator thermometer to ensure that the freezer is at **0 degrees Fahrenheit or below**; the refrigerator should be **33 to 40 degrees Fahrenheit**.

* **People at increased risk of food-borne illness include patients getting chemotherapy or drugs that suppress the immune system, those with impaired immunity (such as HIV/AIDS), the elderly, infants, and pregnant women.**

► **Never leave perishable foods out of the refrigerator for over 2 hours.**

Bacteria in food can double in 20 minutes at room temperature. On hot days, perishable food can spoil in less than one hour if not refrigerated.

- When you make a lot of hot food, divide it into several shallow containers to help it cool faster and to prevent the bacteria growth. The center of the food that is being cooled should reach 40 degrees Fahrenheit within 4 hours.

Thawing food

► **Never thaw foods at room temperature!**

- Thaw frozen foods in the refrigerator overnight in a covered dish to prevent the food from dripping onto refrigerator surfaces or other foods.
- You can also thaw by running cool water (70 degrees Fahrenheit or less) for a few minutes over frozen food for (such as frozen shrimp in a colander).
- Food thawed in a microwave oven set to defrost must be fully cooked immediately after thawing.
- Foods thawed in the microwave should be cooked before refreezing.

Eating out

- **When eating out, the safest choice is made-to-order food served piping hot.**
- Order well-done meat (with juices running clear), hot vegetables, soups, and entrees.

- Foods that have been kept under heat lamps may be riskier than freshly prepared foods, because the temperature might not be as hot.

- Do not eat at salad bars, buffets or pot lucks where safe food handling can't be assured, and where other diners might have touched food or contaminated serving utensils.

- Avoid self-serve condiment dispensers (individual portions of condiments are safer).

- Avoid unpasteurized salsas. Request jarred, pasteurized salsas.

- Place utensils on a napkin or clean tablecloth, not directly on the table.

- While restaurants should follow proper food preparation rules, illnesses have been traced to improperly maintained self-serve ice cream machines, ice and soda machines, luncheon meats, salads, improperly washed fruits and vegetables and undercooked meats.

- You are safest preparing your own food and not eating out when your white blood cell "counts" are low. Before eating at the homes of friends or family, explain your need for safely prepared foods and/or bring your own dish to share.

Leftovers

- If you plan to take part of your restaurant meal home, transfer the food to a container at the table.
- Refrigerate or freeze leftovers immediately and keep well covered.

-
- ▶ Mark leftovers with the date they were put in the refrigerator.
 - ▶ Use refrigerated leftovers within 2 to 3 days or throw them away.
 - ▶ Reheat leftovers until steaming hot (165 degrees Fahrenheit).
 - ▶ Bring soup, sauces, and gravy to a rolling boil when reheating.
 - ▶ When reheating in a microwave, rotate and stir food. Allow a rest time so that heat can be evenly transferred, preventing cold spots.

Meat/fish/poultry

- ▶ **Cook meats, fish, and poultry until well done.** You can't always tell from looking at a food if it has reached a safe temperature, so check temperatures with a meat thermometer inserted into the thickest part (see the chart).
- ▶ **Do not eat any raw or undercooked fish, shellfish, meat, or poultry; this includes foods like raw oysters, uncooked smoked fish/lox, raw fish sushi, and rare meat.**
- ▶ Do not eat hot dogs, luncheon meats, or cold cuts, unless they are reheated until steaming hot (165 degrees Fahrenheit). This includes both meat sliced to order at the deli counter and commercially packaged luncheon meat. To make cold sandwiches, reheated meats can be refrigerated for up to an hour before eating.
- ▶ Keep uncooked meats, fish, poultry, and their juices away from other foods.
- ▶ Use fresh fish, poultry, and ground meat within 1 to 2 days of purchase, and use large cuts of meats (such as roasts)

within 3 days of purchase. Freeze foods if you won't be cooking them within these time frames.

Eggs

- ▶ Keep eggs cold (in an insulated bag) while traveling from the store. Store refrigerated, in the containers they are sold in.
- ▶ See the table for using egg products and safe cooking techniques.

Cheese

- ▶ Do not eat cheese made with "raw" or unpasteurized milk. Many imported cheeses are made from raw milk. Check food labels to verify that the cheese is made from pasteurized milk. Baking risky cheeses to 145 degrees Fahrenheit kills most harmful bacteria, making them safer to eat.
- ▶ Choose commercially packaged, refrigerated, pasteurized cheeses such as American, mozzarella, Jack, Swiss, mild and medium cheddar, and pasteurized cheese spreads.
- ▶ Always verify that the "Use By" date has not passed, and keep cheese refrigerated.

Fruits and vegetables

- ▶ **Reject any food with mold on it** (cutting out a moldy spot is not good enough).
- ▶ Reject any food that is wilted, discolored, bruised, or has an "off" odor.
- ▶ Check "Use By" dates for pre-washed, bagged, raw vegetables.
- ▶ Avoid prepared fruit salads or vegetable salads and pre-cut produce.

-
- ▶ Wash fruits and vegetables right before eating. They will spoil faster if stored wet.
 - ▶ Rinse and rub all surfaces of fruits and vegetables clean under running water. *Soap and diluted bleach are not recommended for use on food.*
 - ▶ Scrub rough surfaces (such as melon rinds) with a vegetable brush before cutting.
 - ▶ If you can't wash it well, don't eat it! This includes berries.
 - ▶ When you eat out and cannot assure that safe food handling guidelines have been followed, avoid raw fruits and vegetables.

Other foods:

- ▶ **Brewer's Yeast:** Avoid raw yeast and supplements containing raw yeast (such as *Saccharomyces*). Some people with very low white blood cell counts (neutropenia) have gotten very sick from these products. Cooked yeast, as in bread, is safe.
- ▶ **Yogurt and Probiotic Foods:** Most natural yogurt contains live, beneficial bacteria known as probiotics. Your doctor might recommend that you choose "heat treated" yogurt products (such as some frozen yogurts) instead of yogurt with "live and active cultures" when you are neutropenic. Follow your medical team's advice.

- ▶ **Home-canned foods:** Improperly canned foods can cause a rare but serious food-borne illness called botulism. Avoid home-canned foods when you have a suppressed immune system.
- ▶ **Honey:** Honey may contain botulism spores. Pasteurization may not kill the spores. **All infants must avoid honey.** Botulism in adults is rare, but follow your medical team's advice about whether you should avoid honey.

Water

- ▶ Tap water from large cities in the United States (municipal water) is considered safe. It is tested many times a day for purity and treated with products such as chlorine to kill bacteria.
- ▶ If there are reports of water quality problems in your area, follow the "boil water" advisories from government authorities. (Usually a rolling boil of 1 minute or longer is recommended during water advisories.)
- ▶ Distilled water and purified bottled water are very safe options.
- ▶ If you receive municipal, treated water but want to improve the chance of safety, boil the water for one minute before storing and using it.
- ▶ If you have well water that is not tested or treated before you receive it, boil the water for 15 minutes, keep it refrigerated and covered, and replace it every 48 hours.

-
- ▶ Filters that can keep particles as small as bacteria and viruses out of water are labeled “micron filters”. Most commercial water filters are not micron filters so they are not able to remove such small particles from water. If you have private well water, do not depend on a water filter alone to make the water safe.

How long do I need to follow these guidelines for food and water safety?

Most of these recommendations are appropriate for everyone to reduce their risk of food-borne illness. Anyone with an immune disorder, who has low white blood cell counts (or is neutropenic) due to treatment, or who is on medicine that suppresses the immune response, is safest by following these guidelines.

- ▶ For those undergoing a transplant of blood products (stem cells, cord blood): follow these guidelines for reducing food-borne illness from before engraftment until all immune suppressing medicines have been stopped.
- ▶ For those having an autologous transplant (of your own cells): Follow these guidelines for 3 months after the transplant.

- ▶ For those having an allogeneic transplant (from a donor): Your doctor can clarify for you when the guidelines can be discontinued.

Resources for more information

<http://www.foodsafety.gov>

<http://www.cdc.gov/foodsafety>

If you have questions about the information here, or about your nutritional health, you may always ask to speak with a Registered Dietitian.

This information is prepared specifically for persons taking part in clinical research at the National Institutes of Health Clinical Center and may not apply to patients elsewhere. If you have questions about the information presented here, talk to a member of your health care team.

Products/resources named serve as examples and do not imply endorsement by NIH. The fact that a certain product/resource is not named does not imply that such product/resource is unsatisfactory.

National Institutes of Health Clinical Center

Bethesda, MD 20892

Questions about the Clinical Center?
<http://www.cc.nih.gov/comments.shtml>

8/31/11

